

## NIH promotes use of lower cost drugs for hypertension

David Spurgeon *Quebec*

The US National Institutes of Health is planning to use some 600 prominent doctors in the United States, Canada, and Puerto Rico to promote the use of lower cost drugs to treat hypertension.

Currently, the cost of anti-hypertensive drugs in the United States amounts to about \$15bn (£8bn; €12bn), accounting for 10% of the country's total spending on drugs. The institutes' \$3.7m initiative is the first time it has tried to promote a change in doctors' prescribing habits.

A study in *JAMA* in 2002 showed that diuretics could be more effective as hypertension treatments than angiotensin converting enzyme inhibitors or calcium channel blockers and at much lower cost (*JAMA* 2002;288:2981-97). The study, known as the antihypertensive and lipid lowering to prevent heart attack trial (ALLHAT), was followed later by updated recommendations to doctors through a consensus process

called the joint national committee reports.

Dr Paul Whelton, senior vice president for health sciences at Tulane University's Health Sciences Centre, New Orleans, and one of the principal authors of the *JAMA* report, said that the study had presented the findings of the largest trial ever carried out in the treatment of hypertension. Yet its impact, and that of a more recent joint national committee report (the seventh), had been disappointing.

He said that he and many colleagues are disturbed at this lack of impact and will use the NIH initiative to try to ensure that practitioners and the general public are aware of, and will implement, the most current findings of the best research.

"It's the first time in the wake of a big trial that we've tried to do this. And largely it's because we've learned from past experience that we were not successful," he told the *BMJ*.

The strategy will be, firstly, to

encourage doctors who participated in the *JAMA* study—who are often influential in their community—to make their colleagues aware of the study's findings and their implications for practice; secondly, to work with those who oversee formularies and thus have great influence on the availability of drugs; and, thirdly, to use public service announcements and printed materials to publicise study results.

The need for the NIH initiative was underlined by a study presented on 4 March to the annual conference of the American Heart Association that showed that spending on anti-hypertensive drugs more or less doubled between 1990 and 2002, rising from about \$6bn to \$12bn.

One of the main reasons was because doctors selected the more costly antihypertensive agents (angiotensin converting enzyme inhibitors and angiotensin receptor blockers)

rather than diuretics. The increase in the cost of the drugs (rather than the amount prescribed) accounted for 32% of the overall rise. □



Dr Paul Whelton is worried because doctors are not implementing trial findings

## US researchers produce 17 new embryonic stem cell lines

Scott Gottlieb *New York*

Researchers in the United States have derived and identified 17 new stem cell lines from human embryos, in addition to the 15 that are currently known to be available for publicly funded research in the United States.

The research, released on the internet this week by the *New England Journal of Medicine* ([www.nejm.com](http://www.nejm.com)), is bound to stir up controversy in a country where stem cell research is a highly contentious issue.

The new stem cell lines were derived from human embryos that were produced through in

vitro fertilisation for clinical purposes, after informed consent from parents and approval from a Harvard University institutional review board. The researchers started out with 286 frozen embryos but were able to derive only 17 individual stem cell lines.

Under additional testing the 17 new stem cell lines showed the capacity to form differentiated cell types in vitro. In an appendix the study includes a 21 page manual on the techniques the researchers used to culture and isolate the stem cells.

Under current US law the

new cell lines cannot be used in research that is funded—even in part—by federal research funds. The cell lines are being made available under a material transfer agreement to selected researchers by one of the lead researchers on the study, Dr Douglas Melton, of Harvard University's department of molecular and cell biology.

In an accompanying editorial Dr Jeffrey Drazen, editor in chief of the *New England Journal of Medicine*, and Dr Elizabeth Phimister, one of the journal's deputy editors, wrote that it is "welcome news" that the Harvard researchers have developed the additional stem cell lines.

"The report is notable in that it sets a standard for the characterisation of embryonic stem-cell lines, and the cell lines described

are easy to culture in vivo," they write. The authors call on the National Institutes of Health to make the cell lines available to researchers funded by the institutes through inclusion in the human embryonic stem cell registry (<http://stemcells.nih.gov/registry/index.asp>).

The reports will provoke controversy in the United States, where debate over the moral and ethical implications of using harvested human embryos for research has been intense. Harvard University already drew criticism earlier this month when it announced that it plans to launch a multimillion dollar centre to grow and study human embryonic stem cells. To harvest embryonic stem cells, researchers must destroy embryos that are a couple of days old. □